imagePROGRAF iPF5000

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Competitive Brief

Canon imagePROGRAF iPF5000 VS. Epson Stylus Pro 4800

SEE THE DIFFERENCE

Why be ordinary when you can be extraordinary? The iPF5000 is the new benchmark for color, quality, speed, ease of use and software in a 17-inch printer. When compared to the Epson Stylus Pro 4800 or any other printer in its class, the iPF5000 is the clear winner!

Color & Quality

The Canon iPF5000 printer and the Epson 4800 both target the photography, proofing and fine art markets where the ability to accurately reproduce color is critical. The Stylus Pro 4800 is a good candidate for printing the average photo. But, for those who want to produce professional prints with a larger gamut of reds, greens, and blues the iPF5000 goes far beyond the average! The Stylus Pro only has eight colors (C, PC, M, PM, Y, LBk, LLBk, Bk, or MBk) while the iPF5000 has an all-new 12 color ink-set featuring red, green, and blue ink. Utilizing these three new colors, as well as its other nine, the iPF5000 demonstrates its ability to produce prints with noticeable differences that showcase this expanded gamut.

The new LUCIA pigment inks that the iPF5000 utilize, exhibit excellent black ink densities on various media types, as well as superb short-term color shift properties, while minimizing the effect of bronzing and metamerism caused by average ink-jet devices.

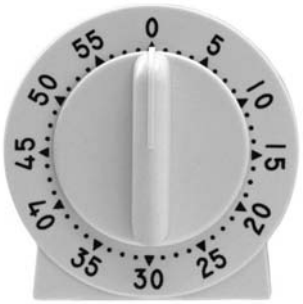
Most printers are limited to 8-bit processing and output. This limits the number of color gradations to 256 from pixel to pixel. The imagePROGRAF iPF5000 printer comes with proprietary Canon software that is capable of 16-bit processing, which dramatically increases the gradations to several thousand thus allowing for more of the color captured to be printed. This capability was designed with the professional in mind and is yet another demonstration of how the iPF5000 is the superior device.

Automatic Black Switching

The iPF5000 will seamlessly use the correct black ink for the job. It will use the appropriate black ink (matte or regular black) depending on what media type is selected by the user. This means NO MANUAL INK CHANGE and NO WASTE. It has both the Matte Black and regular Black online (actually in the printer) at the same time. Epson does not. The Epson black inks must be "switched" manually and this "switch" wastes time and ink.

Speed[1]

The iPF5000 is significantly faster than the Epson 4800 at comparable print-quality modes. The Epson print-head technology, which has been around for several years, now has 1,440 nozzles (180 nozzles per color). Canon has a newly designed dual print head system that has over 30,000 nozzles which is unrivaled in the realm of 17-inch large format printing. This system, combined with Canon's new L-COA high-speed processor, enables the iPF5000 to produce gorgeous, high-quality prints at speeds that are 3 or more times as fast as the Epson 4800.



A common complaint by Epson users is print speed. Because of this, many of them tend not to employ some of the higher-resolution modes of which their printer is capable. They might print at 720 x 720dpi or 720 x 1440dpi, which still takes a very long time (9:46 for a 16" x 20" at 1440dpi or 18:57 for a 16" x2 0" at 2880dpi). The iPF5000 will produce breathtaking 1200x1200 prints in well under 3 minutes, (2:39 for 16.5" x 23.4" at 1200dpi). It will also produce breathtaking 2400x1200dpi prints at speeds that the Epson simply cannot match.

LUCIA ink

LUCIA Pigment Inks

[1]All Epson print speeds referenced was taken from www.epson.com on March 30, 2006.

Usability

The iPF5000 printer has many features that make it a much friendlier alternative to the Epson 4800. Canon's new print heads are extremely durable and long-lasting. However, if they do need to be replaced, the user can complete the process themselves in minutes. The Epson print head is built-in and therefore requires a service call for a technician to come and take the printer apart. This can take several days, leaving the user with significant downtime.

Dual Print-Head System

Both the iPF5000 printer and the Epson 4800 have Clogged Nozzle Detection where they will look for clogged nozzles and automatically perform a cleaning if one is found. The iPF5000 however, has Clogged Nozzle Detection and Compensation system. This takes things a step further. If a clogged nozzle is detected and a cleaning cannot rectify the problem, the iPF5000 will reroute the ink through other functioning nozzles to optimize printing. This saves the user both time and money on wasted output.

Optional Roll Unit
Back of Printer

Cassette

The iPF5000 printer will seamlessly print from both the roll and the cassette, without any manual intervention. Therefore, the user does not need to remove the roll in order to print from the cassette. The Epson 4800 user must manually switch out the paper if they want to print from the roll and then the cassette or vice versa.

The iPF5000 printer has a remaining roll detection system. This allows the user to constantly monitor how much paper is remaining on the roll. The user can actually print out the paper type and length information on the roll in text and in barcode format. The next time the user loads that paper; the iPF5000 will automatically read the barcode and apply the length setting. The Epson has no such function.

Included Software

The iPF5000 printer comes standard with a variety of Canon proprietary software solutions, each focused on different 17-inch workflows. For professional photographers, Canon includes Plug-ins for Adobe® Photoshop® and Digital Photo Professional that allow for processing of 16-bit images, (Windows® and Macintosh®). For the camera enthusiast, Canon includes Digital Photo Print Professional (Windows only) for easy layout, editing and calendar creation. Also, for corporate and print-for-use workflows, PosterArtist 2006 (Windows only) comes in the box with every imagePROGRAF printer. PosterArtist 2006 is a point-and-click, template-based poster creation software with over 1,000 royalty-free images and clip-art included. Canon also includes a very robust Printer Driver that is both Windows and Macintosh compatible along with a Status Monitor and other functional utilities. Epson only includes a basic printer driver and a simple status utility with the 4800.

Cost of Ownership / Price[§]

During a black ink "switch" Epson's estimated total ink waste is between 88ml and 117ml per "switch" (all cartridges combined). The cost of an Epson 110ml ink tank is about $69.95, which equates to $0.64 per milliliter; therefore $56.32 to $74.88 worth of ink is wasted every time the black inks are "switched" on the 4800. The Canon requires no "switch" and therefore wastes no ink, saving the user time and money.

The iPF5000 printer maintains a low cost-per-print even with 12 colors. Typical CMYK printers, like the Epson 4800 will use a mixture of Cyan, Magenta, Yellow, and Black ink to create the various shades of red, green, and blue (using several colors to make one color). But, because the iPF5000 has Red, Green and Blue ink, it requires less ink to make these colors.

The Canon MSRP for the iPF5000 printer is $1,945; the Epson list price for the 4800 is $1,995. Unlike the 4800, the roll-feed unit for the iPF5000 does not come standard with the printer. However, Canon includes a built-in Ethernet card in every iPF5000, where Epson does not. The listed price of the Epson Ethernet card is $299.99. When compared to the $249.00 list price of the Canon roll-feed unit, the consumer is saving another $50.00 when comparably equipping the printer. The iPF5000 has more colors than the Epson 4800 and therefore comes with more ink, including a Matte Black, which Epson does not provide. The imagePROGRAF product also comes with all of the software mentioned above, which makes it a far better value than any other printer in its class, especially the 4800.

[§]All Epson hardware and ink pricing referenced was taken from www.epson.com on March 30, 2006.

	CANON imagePROGRAF iPF5000	EPSON Stylus Pro 4800
Printer Width	17"	17"
Ink Type	Pigment-based archival inks (LUCIA)	Pigment-based archival inks (K3)
Number Of Colors	12 Colors R, G, B, C, PC, M, PM, Y, BK, MBK, GY, PGY	8+1 Colors C, PC, M, PM, Y, LBK, LLBK, BK or MBK
Black To Matte Black Ink Switch	0.0ml (No Ink Waste) No Switching Required - Both Blacks are Online	88ml - 117ml of Ink is Wasted¥ Ink Change Required - Takes about 15 minutes
Ink Tank Size	130ml	110ml Standard 220ml Optional
Ink Cost Per Milliliter	$0.58 / ml - 130ml*	$0.64 / ml - 110ml* $0.51 / ml - 220ml*
Print Speeds	16.54" x 23.39" = 2.69ft2, (A2 Size) Plain Paper - 52 seconds Photo Glossy Paper - 2 minutes 39 seconds ▸ 60.9ft2/hr^	16" x 20" = 2.22ft2 Fastest Listed Speed is 4 minutes 7 seconds Normal is 9 minutes 46 seconds ▸ 13.64ft2/hr^
Print Head System	2 Thermal Inkjet Heads User Replaceable	1 Piezoelectric Inkjet Head Service Call
Number Of Nozzles	2,560 per color 30,720 total	180 per color 1,440 total
Droplet Size	4pl	3.5pl – 12pl (variable)
Min Print Resolution (dpi) **Max Print Resolution (dpi)**	1200x1200 2400x1200	360x180 2880x1440
Clogged Nozzle Detection **Automatic Head Cleanings**	Yes	Yes
Clogged Nozzle Compensation	Yes	No
Automatic Head Alignment	Yes	Yes
Standard Interface	Built-in 10/100 Base T, USB 2.0 High-Speed	USB 2.0 High Speed, IEEE1394
Optional Interface	IEEE1394	10/100 BaseT
Memory	192MB	32MB
Media Handling	Cassette, cut sheet - front, cut sheet - back, optional roll feed (2" & 3" Core), 0.08mm-1.5mm (depending on paper path)	Cassette, cut sheet, roll feed (2" & 3" Core) 12lb Bond - 1.5mm
Automatic Media Source Switching	Yes	No
Borderless Capability	Yes, On Specific Roll sizes (10", 13", 14", 16", 17", B4, A2)	Yes, On Specific Roll sizes (8.3, 10", 12", 13", 14", 16", 17")
Print Languages	GARO (Canon Proprietary)	ESC/P (EPSON Proprietary)
Optional print Languages	PostScript (via additional RIP)	PostScript (via additional RIP)
Macintosh Compatible	Yes	Yes
Bit Depth Processing Capabilities	8-Bit, 16-Bit (through Canon Plug-ins)	8 Bit
Included Printing Software	Printer Driver 2006, Print Plug-in for Photoshop®, Print Plug-in for DPP, Printer Driver Extra Kit (Free Layout, imageRUNNER Linking Function)	Printer Driver
Included Software Applications	PosterArtist 2006, Digital Photo Print Pro	None
Optional Cabinet / Stand	Yes	Yes
Warranty	One-year Next business-day On-site	One-year Next business-day On-site

*Based on MSRP for March 2006
^Square feet per hour were calculated using the respective print speed numbers shown, only to illustrate print speeds in a common unit of measure. Canon makes no actual claim to the print speeds of the iPF5000 or the Epson Stylus Pro 4800 in terms of square feet per hour.
¥All Epson ink waste data referenced was taken from www.epson.com on March 30, 2006.

Printed images are simulated